Fri

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB seq length:
DB seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-019-214-1
822
1 ttgcgtgtttttgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37577330 seqs, 17593059518 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       September 30, 2004, 12:24:53 ; Search time 2190.82 Seconds (without alignments)
13201.892 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum Match 0%
Maximum Match 100%
Listing first 45 st
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pending Patents NA Main: *
| cgn2_6/ptodata/2/pna/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ttgcgtgtttttgccatttc.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
/ Cgnn2_6/ptodata/2/pna/US09_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US09_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US080_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US080_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US081_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US082_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US083_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US083_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US085_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US085_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US085_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US085_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US090_COMB.seq: *
/ Cgnn2_6/ptodata/2/pna/US090_CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6 (c) 1993 - 2004 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pna/PCTUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ....aatattggcagtttgtataa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMB. seq:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .75154660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  822
```

```
444 / cgm2 6/ptodata/2/pna/US1010 COMB seq:
465 / cgm2 6/ptodata/2/pna/US1011 COMB seq:
465 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
467 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
468 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
501 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
502 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
503 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
504 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
505 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
506 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
507 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
508 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
509 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
509 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
501 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
502 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
503 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
504 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
505 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
506 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
507 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
508 / cgm2 6/ptodata/2/pna/US1012 COMB seq:
509 / cgm2 6/ptodata/2
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

```
RESULT 1

US-10-019-214-1

Sequence 1, Application US/10019214

GENERAL INFORMATION:

APPLICANT: Logan, Susan M.

APPLICANT: Wakarchuk, Warren

APPLICANT: Conlan, Wayne

APPLICANT: Monteiro, Mario A.

APPLICANT: Monteiro, Mario A.

APPLICANT: Hiratsuka, Koji

TITLE OF INVENTION: GLYCOSYLTRANSFERASES OF HELICOBACTER PYLK

TITLE OF INVENTION: TARGET IN PREVENTION AND TREATMENT OF H.

TITLE OF INVENTION: INFECTIONS

FILE REFERENCE: 12243.24USWO

CURRENT APPLICATION NUMBER: US/10/019,214

PRIOR APPLICATION NUMBER: PCT/CA00/00777

PRIOR APPLICATION NUMBER: PCT/CA00/00777

PRIOR FILING DATE: 2000-06-28

PRIOR APPLICATION NUMBER: 60/140,820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         n
                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match
                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                          BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      102
52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13
13
13
149
10
                                                                                                                                                                                                                                                                         43 US-10-019-214-1
43 US-10-019-214-1
43 US-10-218-381-2
47 US-08-21-066-185
11 US-08-761-066-185
12 US-08-761-066-185
13 US-08-761-425-478
14 US-08-21-022A-3964
15 US-08-487-032C-119
16 US-08-487-032C-119
17 US-08-621-469A-9621
18 US-08-93-002A-9621
19 US-08-93-002A-9621
19 US-08-93-002A-2793
10 US-08-93-002A-2793
11 US-08-621-425-124
10 PCT-US-315-977-2793
11 US-08-561-469A-990
11 US-08-561-469A-990
11 US-08-761-184-223
11 US-08-821-931-223
11 US-08-821-931-223
11 US-08-821-931-223
11 US-08-821-931-223
12 US-08-761-184-223
13 US-08-93-002A-3756
14 US-08-93-002A-3756
15 US-08-93-002A-3756
16 US-08-93-002A-3756
17 US-08-93-002A-3756
18 US-08-93-002A-3756
19 US-08-821-931-742
19 US-08-93-002A-3756
                                                                                                                                                                                                                                          ALIGNMENTS
                                                                                                                                                                                                                                                                        Sequence 1, Appli
Sequence 2, Appli
Sequence 3, App
Sequence 3963, Ap
Sequence 3964, Ap
Sequence 3964, Ap
Sequence 3964, Ap
Sequence 119, App
Sequence 119, App
Sequence 119, App
Sequence 2792, Ap
Sequence 2793, Ap
Sequence 2793, Ap
Sequence 2793, Ap
Sequence 2794, App
Sequence 2794, App
Sequence 2794, App
Sequence 2795, Ap
Sequence 2796, Appli
Sequence 2797, App
Sequence 2797, App
Sequence 2797, App
Sequence 2797, App
Sequence 317, App
Sequence 317, App
Sequence 375, Ap
Sequence 3756, Ap
Sequence 3756, Ap
Sequence 3756, Ap
Sequence 3756, Ap
Sequence 3757, Ap
                                                                                   OF H. PYLORI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                               NEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; PRIOR FILING DATE: 1999-06-28; NUMBER OF SEQ ID NOS: 16; SOFTWARE: PatentIn Ver. 2.1; SEQ ID NO 1; LENGTH: 822; TYPE: DNA ; ORGANISM: Helicobacter pylori US-10-019-214-1
     RESULT 2
US-10-019-214-9
; Sequence 9, Application US/10019214
                                                                             á
                                                                                                        음 중
                                                                                                                                            밁
                                                                                                                                                                    á
                                                                                                                                                                                        문
                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                 유 성
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 822; Conserv
                                                                                                                                                   199
                                                                                                                                                                          661
                                                                                                                                                                                                601
                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                         721
                                                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                          AGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                 ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIGCGTGTTTTTGCCATTTCTTTAAATCAAAAAGTGTGCGATACATTTGGTTTAGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGCGTGTTTTTGCCATTTCTTTAAATCAAAAAGTGTGCGATACATTTGGTTTAGTTTTT
                                                                                                                                                                                                                                                                                                                                                                               ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 822; DB 43; ilarity 100.0%; Pred. No. 1.2e-212; Conservative 0; Mismarchec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                822
                                                                                     822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                               780
                                                                                                                                                      720
                                                                                                                                                                                                  660
                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                           720
                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                 420
```

```
APPLICANT: Altman, Bleonora

APPLICANT: Hiratsuka, KOji

TITLE OF INVENTION: GLYCOSYLTRANSFERASES OF HELICOBACTER PYLORI AS A NEW TITLE OF INVENTION: TARGET IN PREVENTION AND TREATMENT OF H. PYLORI TITLE OF INVENTION: INFECTIONS FILE REPERENCE: 12243.24USWO
CURRENT APPLICATION NUMBER: US/10/019.214
CURRENT FILING DATE: 2001-12-21
PRIOR APPLICATION NUMBER: PCT/CA00/00777
PRIOR FILING DATE: 2000-06-28
PRIOR FILING DATE: 1999-06-28
PRIOR APPLICATION NUMBER: 60/140,820
PRIOR FILING DATE: 1999-06-28
INUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver: 2.1
                                                  맑
                                                                          ઠ
                                                                                                       밁
                                                                                                                             S
                                                                                                                                                          맑
                                                                                                                                                                                   á
                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; SEQ ID NO 9
; LENGTH: 822
; TYPE: DNA
; ORGANISM: Helicobacter pylori
US-10-019-214-9
                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 94.0%;
Best Local Similarity 96.3%;
Matches 791; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Logan, Susan M.
APPLICANT: Wakarchuk, Warren
APPLICANT: Conlan, Wayne
APPLICANT: Monteiro, Mario A
                                                    541
                                                                             541
                                                                                                        481
                                                                                                                                481
                                                                                                                                                           421
                                                                                                                                                                                      421
                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                           241
601
                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
               AAAGTTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                        AGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                     ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGAGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                             GAGGTTTCTAAGTTTTATTACGCCTTTAAAATACCATGCGAAGTTTATGAGCCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                            CACCCTTATTTCATCACGCAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAAGCATTTA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAGACACCACAACTTTACTCAATAGCATCAATGCCACCACCACCACCAAGGGCAAATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGCGTGTTTTTGCCATTTCTTTAAATCAAAAAGTGTGCGATACATTTGGTTTTAGTTTTT
                                                    ATTAAAGCTTATAGCGAAGGGGTGGGGACTCAAGGCTATGTGATCACGCCCAAGATTGCC
                                                                   ATTADAGCTTATAGCGAAGGGGTGGGGACTCAAGGCTATGTGATCACGCCCTAAGATTGCC
                                                                                                        AATATTAAAAGTGAGCCATTGAACCATAAAAACCACGAGATACAAGAGCGTGTAGGGATT
                                                                                                                                                           TTAGAAAAACACATCCAAGAGTTAGGCTATGTTCGCTTGATGCATTTATTATATGATCCC
                                                                                                                                                                            TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                 ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                       CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                           GAGGTTTCTAAGTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGCGTATTTTATCATTTCTTTAAATCAAAAAGTGTGCGATAAATTTGGTTTGGTTTTT
                                                                                                                                                                                                                                                                      GGGTGCTATGCGAGCCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mario A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 773; DB 43;
Pred. No. 2.6e-199;
O; Mismatches 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEW
  660
                            660
                                                     600
                                                                               600
                                                                                                          540
                                                                                                                                  540
                                                                                                                                                              480
                                                                                                                                                                                         480
                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                        á
                                                                                                                                                          Ś
                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                            밁
                                              S
                                                                             밁
                                                                                                                                   문
                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
  421
                             361
                                                     361
                                                                                301
                                                                                                          301
                                                                                                                                   241
                                                                                                                                                              241
                                                                                                                                                                                         181
                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                  μ
```

```
TITLE OF INVENTION GLYCOSYLTRANSFERASE AND DNA ENCODING THE FILE REFERENCE: 2139.18
CURRENT APPLICATION NUMBER: US/10/218,381
CURRENT FILLING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: US/09/601,519
PRIOR PILLING DATE: 2000-08-02
PRIOR PILLING DATE: 2000-08-02
PRIOR PILLING DATE: 1000-08-02
PRIOR PILLING DATE: 1999-01.27
PRIOR PILLING DATE: 1999-01.27
PRIOR PILLING DATE: 1999-01.27
PRIOR PILLING DATE: 1998-02-04
NUMBER OF SEQ ID NUMBER: US/09/3389
PRIOR FILLING DATE: 1998-02-04
VOMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 819
TYPE: DNA
ORGANISM: Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-10-218-381-2
; Sequence 2, Applicat:
; GENERAL INFORMATION:
                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Sim
Matches 790;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Satoshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                        GAGGTTTCTAAGTTTTATTACGCTTTTAAAATACCATGCGAAGTTTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                          CACCCTTATTTCATCACGCAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIGCGTGTTTTTTGCCATTTCTTTAAATCAAAAAGTGTGCGATACATTTGGTTTAGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACTCCATTTTAAATATTTGAAATATTGGCAGTTTGTATA 821
TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                        ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                              CTTGGGTGCTATGCGAGCCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                    CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                GAGGTTT
                                                                                                                                                                                                                                                                                                              CACCCTTATTTCATCACGCAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAAGCATTTA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Satoshi KOIZUMI.
Tetsuo ENDO
Kazuhiko TABATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/10218381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTCCATTTTAAATATTTGAAATATTGGCAGTTTATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAATCTCTACGATAGCGCGAAAAGAACAACCTTATAGCCCCTAAAATCGCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCTAAAATCGCCTTAATGAGA 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGARCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Akio OZAKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94.0%; Score 772.6; DB 47; ilarity 96.5%; Pred. No. 3.3e-199; Conservative 0; Mismatches 29;
                                                                                                                                                                                                                                CTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THE SAME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              819;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                            480
                                                                     420
                                                                                                            420
                                                                                                                                                   360
                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
CURRENT APPLICATION NUMBER: US/08/761,066
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
PRIOR APPLICATION NUMBER:
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amy E.
NAME: Mandragouras, Amy E.
NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: GTN-012
REFERENCE/DOCKET NUMBER: GTN-012
REFERENCE/DOCKET NUMBER: GTN-012
TELEPHONE: (617)227-7400
TELEPHONE: (617)227-9941
INFORMATION FOR SEQ ID NO: 185:
SEQUENCE CHARACTERISTICS:
LENGTH: 822 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
TOPOLOGY: circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   먉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-08-761-066-185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 185, Application US/08761066 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: LAHIVE & CO
STREET: 60 State Stree
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109-1875
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM IS
COMPUTER: 05 FORM:
MEDIUM SYSTEM:
OPERATING SYSTEM:
SOFTWARE:
TOPOLOGY: circu
MOLECULE TYPE: DN
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: DOUGLAS SMITH ET AL
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
TITLE OF INVENTION: RELATING TO HELICOBACTER PYL
TITLE OF INVENTION: THERAPEUTIC USES THEREOF
NUMBER OF SEQUENCES: 714
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACTCCATTTTAAATATTTGAAATATTGGCAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACTCCATTTTAAATATTTGAAATATTTGGCAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCTAAAATCGCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCTAAAATCGCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTTTTATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANAGTTTTTAAAAAACACAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANAGTTTTTTTGANATGCAGCCGANAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTAAAGCTTATAGTCATGGGGTGGGGACGCAAGGCTATGTGATCACGCCCAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTAAAGCTTATAGCGAAGGGGTGGGGACTCAAGGCTATGTGATCACGCCTAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATGTTAAAAGTGAGCCATTGAACCATAAAAACCACGAGATACAAGAGCGTGTGGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAGAAAAACACATCCAAGAGTTAGGCTATGTTCGCTTGATGCATTTATTATATGACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60 State Street, Suite 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                           IS09660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PYLORI AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORIGINAL SOURCE:
; ORGANISM: Helicobacter p
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 1...822
US-08-761-066-185
           US-08-93-002A-3963
S-08-993-002A-3963
Sequence 3963, Application US/08993002A
GENERAL INFORMATION:
                                                                                                                                         Ő
                                                                                                                                                                           밁
                                                                                                                                                                                                 S
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 780
 APPLICANT:
                                                                                                                                             781
                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                             721
                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                781
                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                GAACTCCATTTTAAATTTTTGAAATGGTGGCAGTTTGTATAA
                                                                                                                                 GAACTCCATTTTAAATATTTGAAATATTTGGCAGTTTGTATAA 822
                                                                                                                                                                                                 CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCTAAAATCGCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGTAAAAAGTGAGCCATTGAGCCATAAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACCCTTATTTCATCACGCAAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAAGCATTTA 180
                                                                                                                                                                             CAAATCTCTACGATAGCGCGAAAAGAAGAACCCTATAGCCCCTAAAATCGCTCTAATGAGA
                                                                                                                                                                                                                                          ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                     ACTITTATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                           AAAGTTTTTTTGAAACACAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                           AAAGTTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTGTATTITAGAAGACGATATAACCTTGAAAGAGGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGTTTCTAAGTTTTATTACGCTTTAAAAATACCATGCGAAATTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTANAGCTTATAGCGAAGGGGTGGGGACTCAAGGCTATGTGATCACGCCTAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTAGAAAAACACATCCAAGAGTTAGGCTATGCGCGTTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGGGTGCTATGCGAGCCATTATTCGTTGTGGCAAAAATGCATAGAGCTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACCCTTATTTCATCACGCAAAATATCAAAGACATGGGGATTGCAACCAGTCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGCGATTTATTCCAAGACTTTTGAAGGCGGGTTGCACCCCCTAGTTAAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGCGTGTTTTTGCCATTTCTTTAAATCAAAAAGTGTGCGATACATTTGGTTTTAGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGTGAAAAGTGAGCCTTTAAACCATAAAAACCAAGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGCGTGTTTTTATCATTTCTTTAAATCAAAAAGTGTGCGATAAATTTGGTTTGGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91.8%;
nilarity 94.9%;
Conservative
 DOUGLAS SMITH et al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 754.8; DB 11;
Pred. No. 2.3e-194;
0; Mismatches 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    822;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                               780
                                                                                                                                                                                                            780
                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

480

780

720

720

540 600 660

660

```
B
                                                                                                                                                                 ঠ
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                  ક
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                          Ś
                            ફ
                                                                밁
                                                                                                 ફ
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-993-002A-3963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: RELATING ...
TITLE OF INVENTION: DIAGNOSTICS AND
TITLE OF INVENTION: DIAGNOSTICS AND
NUMBER OF SEQUENCES: 10031
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 28 State Street
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (617)742-4214
INFORMATION FOR SEQ ID NO: 3963:
SEQUENCE CHARACTERISTICS:
LENGTH: 822 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: DNA (9
HYPOTHETICAL: NO
ANTI-SENSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Windows NT 4.0
SOFTWARE: UNIX
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/993,002A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE: misc_feature LOCATION: 1...822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Mandragouras, Amy E. REGISTRATION NUMBER: 36,270 REFERENCE/DOCKET NUMBER: GTT TELECOMMUNICATION INFORMATION: TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                  Local Sim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                301
                                                                                                                                      181
                                                                                                                                                                     181
                                                                                                                                                                                                       121
                                                                  241
                                                                                                    241
                                                                                                                                                                                                                                         121
301
                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                ,,,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02109-1875
                                                                                                                                                                                                                                                                                                                                                                                                             h 91.8%;
Similarity 94.9%;
BO; Conservative
                                                                                      GAGGTITCTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG 300
                                                                                                                                                                                                                           GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                   TIGCGIGITITITGCCATITCTITAAAICAAAAAGIGIGGCGATACAITITGGITTTAGITTTI
                                                                                                                                    CACCCTTATTTCATCACGCAAAATATCAAAGACATGGGGATTGCAACCAGTCTCATCAGT
                                                                                                                                                          CACCCTTATTTCATCACGCAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                                                                                         GATGCGATTTATTCCAAGACTTTTGAAGGCGGGTTGCACCCCCTAGTTAAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                                                              CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG 360
                                                                  GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAATTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                           Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO HELLCOBACTER PYLORI FOR DIAGNOSTICS AND THERAPEUTICS 10031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTN-018
                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                Score 754.8; DB 13;
Pred. No. 2.3e-194;
0; Mismatches 42;
                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                        822;
                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                        240
                                                                                                                                                                                                           180
                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                   60
                                                                      300
                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
US-10-335-977-3963
US-10-335-977-3963
; Sequence 3963, Application US/10335977
; GENERAL INFORMATION:
APPLICANT: DOUGLAS SMITH et al
APPLICANT: DOUGLAS SMITH et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES
RELATING TO HELICOBACTER PYLORI FOR
PRIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                       INFORMATION FOR SEQ ID NO: 3963: SEQUENCE CHARACTERISTICS:
                                                                                  COMPUTER READABLE FORM:

MEDIUM TYPE: CD/ROM IS09660

COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Windows NT 4.0
SOFTWARE: UNIX

CURRENT APPLICATION NUMBER: US/10/335,977
FILING DATE: 30-Dec-2002
PRIOR APPLICATION NUMBER: 08/993,002
PRIOR APPLICATION NUMBER: 08/993,002
PRIOR APPLICATION NUMBER: 08/993,002
PRIOR APPLICATION NUMBER: 08/993,002
PRIOR APPLICATION NUMBER: 36,207
ATTORNEY/AGENT INFORMATION:
NAME: MANGER SANGER: 36,207
REGISTRATION INFORMATION:
TELEPHONE: (617)227-7400
TELEPHONE: (617)227-7400
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 10031
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACTCCATTTTAAATATTTGAAATATTTGGCAGTTTTGTATAA 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTADAGCTTATAGCGAAGGGGTGGGGGACTCAAGGCTATGTGATCACGCCTAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTCCATTTTAAATTTTTGAAATGGTGGCAGTTTGTATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CARATETETACGATAGCGCGARARGARGARCCCTATAGCCCTARAATCGCTCTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCCTAAAAATCGCCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTITTATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATGATGGTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAGTTTTTTTGAAACACAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGATC
     LENGTH: 822 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAAAGCTTATAGCCATGGGGTGGGGACGCAAGGCTATGTGATCACGCCCAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCGTGAAAAGTGAGCCTTTAAACCATAAAAACCAAGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTAGAAAAACACATCCAAGAGTTAGGCTATGCGCGTTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28 State Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         822
```

```
NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...822
SEQUENCE DESCRIPTION: SEQ ID NO: 3963:
US-10-335-977-3963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PEATURE:
                                                                                                                                                                                           601
                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                            781
                                                             721
                                                                                             721
                                                                                                                              661
                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    h 91.8%; Score 754.8; DB 49
Similarity 94.9%; Pred. No. 2.3e-194;
80; Conservative 0; Mismatches 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAAGCATTTA 180
 GAACTCCATTTTAAATTTTTGAAATGGTGGCAGTTTGTATAA
                  GAACTCCATTTTAAATATTTGAAATATTGGCAGTTTGTATAA 822
                                                                                                                                                                                                              AAAGTTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                               ATTAAAGCTTATAGCGAAGGGGTGGGGACTCAAGGCTATGTGATCACGCCCTAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACCCTTATTTCATCACGCAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGCGATTTATTCCAAGACTTTTGAAGGCGGGTTGCACCCCCTAGTTAAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCCTAAAATCGCCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                           AGCGTGAAAAGTGAGCCTTTAAACCATAAAAACCAAGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                              AGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                            TTAGAAAAACACATCCAAGAGTTAGGCTATGCGCGTTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                               TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTGTATTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGGATTTTAAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGGGTGCTATGCGAGCCATTATTCGTTGTGGCAAAAATGCATAGAGCTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAATTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACCCTTATTTCATCACGCAAAATATCAAAGACATGGGGATTGCAACCAGTCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGCGTGTTTTTGCCATTTCTTTAAATCAAAAAGTGTGCGATACATTTGGTTTAGTTTTT
                                                                                                                            ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                    ACTTTTATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                              AAAGTTTTTTTGAAACACAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                            ATTAMAGCTTATAGCCATGGGGTGGGGACGCAAGGCTATGTGATCACGCCCAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6
                                                                                               780
                                                                                                                                                              720
                                                                                                                                                                                                660
                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                  780
                                                                                                                              720
                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
             ঠ
                                                   유
                                                                                Ś
                                                                                                              밁
                                                                                                                                             Ś
                                                                                                                                                                               밁
                                                                                                                                                                                                            S
```

δ 밁 ð 8 á ર્ 밁 ð 밁 δ 밁 ঠ 문 ફ 밁 र् 밁 δ 밁 S 밁 Ś 8 ફ 망 S

0

```
STREET: 60 State Street, Suite 510
STREET: Massachusetts
COUNTRY: USA
ZIP: 02109-1875
COMPUTER READABLE FORM:
MEDIUM TYPE: 8mm cartridge tape
COMPUTER: SPARC station LX
OPERATING SYSTEM: SUNCS4
SOPTWARE: tar
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/621,425
FILING DATE: 25-MARCH-1996
PRIOR APPLICATION NUMBER: 08/561,469
FILING DATE: 17-NOV-1995
PRIOR APPLICATION NUMBER: 08/487,032
FILING DATE: 07-JUNE-1995
APPLICATION NUMBER: 08/487,032
FILING DATE: 07-JUNE-1995
ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: GTN-001(
TELEPAN: (617)227-5941
INFORMATION FOR SEQ ID NO: 478:
SEQUENCE CHARACTERISTICS:
LENGTH: 9382 base pairs
TYPE: nucleic acid
STRANDENNESS: double
TODOLOGY: CIrcular
TODOLOGY: CIrcular
TODOLOGY: CIRCUlar
                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 478, Application US/08621425
; GENERAL INFORMATION:
APPLICANT: Douglas Smith
TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES
TITLE OF INVENTION: RELATING TO HELICOBACTER PYLORI FOR
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
US-08-621-425-478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-621-425-478/C
                                                                                                                                                                                                                                                                                                                                                            Query Match 91.6%; Score 753.2; DB 10; Best Local Similarity 94.8%; Pred. No. 1.6e-193; Matches 779; Conservative 0; Mismatches 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA (genomi
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Helicobacter p
FEATURE:
NAME/KEY: misc feature
LOCATION: 1...9382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 495
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFLELD
                                        2577
                                                                                                                       2637
                                                                                                                                                                                                   2697
                                                                                                                                                                                                                                                                                    2757
                                                                            181
                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                        \vdash
GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG
                                                                 CACCCTTATTTCATCACGCAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                              GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAAGCATTTA 180
                                                                                                                                                                                                                        TTGCGTGTTTTTATCATTTCTTTAAATCAAAAAGTGTGCGATAAATTTGGTTTGGTTTTT
                                                                                                                                                                                                   GATGCGATTTATTCCAAGACTTTTGAAGGCGGGTTGCACCCCCTAGTTAAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                         TTGCGTGTTTTTTGCCATTTCTTTAAATCAAAAAGTGTGCGATACATTTGGTTTTAGTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/621,425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTN-001CP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        510
                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                           9382;
                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                240
                                                                                                                         2578
                                                                                                                                                                                                                                                                                    2698
                                          2518
                                                                                                                                                                                                       2638
                                                                                                                                                                                                                                                                                                                            60
      300
```

```
RESULT 8
US-08-993-002A-3964
                                                                                                                                                                                                                                                                                                                 Sequence 3964, Application US/08993002A
GENERAL INFORMATION:
APPLICANT: DOUGLAS SMITH et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES
TITLE OF INVENTION: RELATING TO HELICOBACTER PYLORI FOR
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
NUMBER OF SEQUENCES: 10031
CORRESPONDENCE ADDRESS:
ADDRESSE: LAHIVE & COCKFIELD
STREET: 28 State Street
FILING DATE:
ATTORNEY/AGENT INFORMATION:
ANAME: MANDAGGOUTAS, AMY E.
NAME: MANDAGGOUTAS, AMY E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: GTN-018
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                               ZIP: 02109-1875
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Windows NT 4.
SOFTWARE: UNIX
                                                                              PILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
FILING DATE:
TUPORMATI
                                                                                                                                      CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE:
                                                                                                                                                                                                                                                                     STREET: 28 Str
CITY: Boston
STATE: Massacl
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTCCATTTTAAATATTTGAAATATTGGCAGTTTGTATAA 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAPATCTCTACGATAGCGCGAAAAGAAGAACCCTATAGCCCTATAAATCGCTCTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCTAAAATCGCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTTTTATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGTTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTADAGCTTATAGCGAAGGGGTGGGGACTCAAGGCTATGTGATCACGCCTAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTAGAAAAACACATCCAAGAGTTAGGCTATGCGCGTTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGGGTGCTATGCGAGCCATTATTCGTTGTGGCAAAAATGCATAGAGCTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACTCCATTTTAAATTTTTGAAATGGTGGCAGTTTGTATAA 1936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANAGITTTTTTGANACACAGCCGANNATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTAAAGCTTATAGCCATGGGGTGGGGACGCAAGGCTATGTGATCACGCCCAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGTGAAAAGTGAGCCTTTAAACCATGAAAACCAAGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                         Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 35
SEQUENCE CHARACTERISTICS:
LENGTH: 837 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: DNA (genomic
HYPOTHETICAL: NO
ORIGINAL SOURCE:
ORGANISM: Helicobacter py
FEATURE:
NAME/KEY: misc_feature
LOCATION: 1..837
US-08-993-002A-3964
                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                             5
                                                                                 밁
                                                                                                       δ
                                                                                                                                           문
                                                                                                                                                                    á
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  499
                                                                                                                                                                                                                                                                                                                            439
                                                                                                                                                                                                                                                                                                                                                                                      379
                                                                                                                                                                                                                                                                                                                                                                                                                                                319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                   721
                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                       739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAAGCATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCCTTATTTCATCACGCAAAATATCAAAGACATGGGGATTGCAACCAGTCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCCTTATTTCATCACGCAAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCTAAAATCGCCTTAATGAGA 780
                                                                                                                                                                                                                         ATTADAGCTTATAGCGAAGGGGTGGGGGACTCAAGGCTATGTGATCACGCCTAAGATTGCC
                                                                                                                                                                                                                                                                  AGCGTGAAAAGTGAGCCTTTAAACCATGAAAACCAAGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                   AGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTGGGTGCTATGCGAGCCATTATTCGTTGTGGCAAAAATGCATAGAGCTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAATTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGCGATTTATTCCAAGACTTTTGAAGGCGGGTTGCACCCCCTAGTTAAAAAAGCATTTA
                         CANATOTOTACGATAGOGGGANANGANGANCCOTATAGOCCOTANANTOGOTOTANTGAGA
                                                                                 ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                  ACTTTTATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                            AAAGTTTTTTTGAAACACAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                            AAAGTTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                     ATTANAGCTTATAGCCATGGGGTGGGGACGCAAGGCTATGTGATCACGCCCAAGATTGCC
                                                                                                                                                                                                                                                                                                                          TTAGAAAAACACATCCAAGAGTTAGGCTATGCGCGTTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                             TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                      ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                      ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91.3%;
94.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3964:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>..</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 750.2; DB 13
Pred. No. 4.2e-193;
0; Mismatches 43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 837;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                       738
                                                                                                                   720
                                                                                                                                                 678
                                                                                                                                                                               660
                                                                                                                                                                                                           618
                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                       558
                                                                                                                                                                                                                                                                                                                                 498
                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                           438
                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                   378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         78
```

밁 Ś 8 ર્ક 밁 ঠ 밁 ક 밁 Ś 밁 S 밁 S 밁 ঠ 밁 ঠ 유

```
RESULT 9
US-10-335-977-3964
US-10-335-977-3964
; Sequence 3964, Application US/10335977
; GENERAL INFORMATION:
APPLICANT: DOUGLAS SMITH et al
APPLICANT: DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...837
SEQUENCE DESCRIPTION: SEQ ID NO: 3964:
US-10-335-977-3964
                                                                     밁
                                                                                                                                      ફ
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Windows NT 4.0
SOPTWARE: UNIX
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/335,977
FILING DATE: 30-Dec-2002
PRIOR APPLICATION NUMBER: 08/993,002
PRIOR APPLICATION NUMBER: 08/993,002
PRIOR APPLICATION NUMBER: 08/993,002
PILING DATE: 17-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: MANDATASHER: 36,207
REFERENCE/DOCKET NUMBER: 36,707
REFERENCE/D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity Matches 776; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: circular MOLECULE TYPE: DNA (genomic) HYPOTHETICAL: NO ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 10031
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
       181
                                                                                                                                          121
                                                                                                                                                                                                                  79
                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                                                                                             TIGCGIGITITITGCCATITCTITAAAICAAAAAGIGIGCGATACATITGGITTTAGITITT
   CACCCTTATTTCATCACGCAAAACATCAAAGACATGGGGATTACAACCAATCTCATCAGT
                                                                                                                                          GATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAGCATTTA 180
                                                                                                                                                                                                                                                                                    GAACTCCATTTTAAATTTTTGAAATGGTGGCAGTTTGTA
                                                                        GATGCGATTTATTCCAAGACTTTTGAAGGCGGGTTGCACCCCCTAGTTAAAAAAGCATTTA 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 837 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                  ORGANISM: Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACTCCATTTTAAATATTTGAAATATTGGCAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 02109-1875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Boston
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 28 State Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91.3%;
94.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 750.2; DB 49; Pred. No. 4.2e-193;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                  138
                                                                                                                                                                                                                                                                                                                                                         78
                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
US-08-487-032A-119
; Sequence 119, Application US/08487032A
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
SOFTWARE: PATENTIN Release #1.0, Vers
CURRENT APPLICATION DATA;
APPLICATION NUMBER: US/08/487,032A
FILING DATE: 07-JUNE-1995
ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amp E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: GTN-001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 02109-1875
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 60 S
CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAACTCCATTTTAAATATTTGAAATATTGGCAGTTTGTA 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAATCTCTACGATAGCACGAAAAGAAGAACCTTATAGCCCTAAAAATCGCCTTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTTTTATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGTTTTTTTGAAACACAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGTTTTTTTGAAATGCAGCCGAAAATGGGTTGTTCCTGTGGATACGATAATGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGGATTTTAAAGAGGGCCTTGGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGTTTCTAAGTTTTTATTACGCTTTTAAAATACCATGCGAAGTTTATGAGCTTGGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAATCTCTACGATAGCGCGAAAAGAAGAACCCTATAGCCCTAAAATCGCTCTAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTANAGCTTATAGCCATGGGGTGGGGACGCAAGGCTATGTGATCACGCCCAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTAAAGCTTATAGCGAAGGGGTGGGGACTCAAGGCTATGTGATCACGCCTAAGATTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGTAAAAAGTGAGCCATTGAGCCATAAAAAACCACGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGGTTTCTAAGTTTTATTACGCTTTAAAATACCATGCGAAATTTATGAGCTTGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTITIATCCATGGCGTGAAAAATCTGGTGTTACAACCTTTTGTGATCGCTGATGATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGGGTGCTATGCGAGCCATTATTCGTTGTGGCAAAAATGCATAGAGCTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGTGAAAAGTGAGCCTTTAAACCATGAAAACCAAGAGATACAAGAGCGTGTGGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAGAAAAACACATCCAAGAGTTAGGCTATGCGCGTTTGATGCATTTATTGTATGATGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO HELICOBACTER PYLORI FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                       Version #1.25
```

540 558 600

819

480

438

498

420

360

258

378

```
RESULT 11
US-08-487-032C-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-487-032A-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 119, Application US/08487032C
GENERAL INFORMATION:
APPLICANT: DOUGLAS SMITH
APPLICANT: DOUGLAS SMITH
APPLICANT: NUCLEIC ACID AND AMINO ACID SEQUENCES
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES
RELATING TO HELICOBACTER PYLORI FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (617)227-7400
TELEFAX: (617)227-5941
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 285 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: D
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATION SYSTEM: PC-DOS/MS-DOS
OPERATION PC-DOS/MS-DOS
OPERATION NUMBER: US/08/487,032C
PILING DATE: 07-Jun-1995
ATTORNEY/AGENT INFORMATION:
NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: GTN-001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KRY: misc_feature
LOCATION: 1...285
OTHER INFORMATION: /note= "influenzae type B
OTHER INFORMATION: lipooligosaccharide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 941
CORRESPONDENCE ADDRESSE: LAHIVE +ACY-
STREET: 28 State Street
CITY: Boston
                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        334 GAAAAATGCATAGAACTCAATGAAGCGATCTGTATTTTAGAAGACGATGTAACCTTGAAA 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       214 ATGGGGATTACAACCAATCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tch 32.0%; al Similarity 95.4%; 271; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGTTTGATGCATTTATTGTATGATGCCAGCGTGAAAAGTGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATATC 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAMMATGCATAGAGCTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCTTGATGCATTTATTGTATGATGCCAGTGTAAAAAGTGAGCC 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATGCG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGCGAAATTTATGAGCTTGGGGAGCTTGGGTGCTATGCGAGCCATTATTCGTTGTGG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGCGAAGTTTATGAGCTTGGGGAGCTTGGGTGCTATGCGAGTCATTATTCCTTGTGG 333
                                                                                                                                                                                                                                                                                                                   STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGGGATTGCAACCAGTCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAAATAC 60
                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         119:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 263.2; DB 8 Pred. No. 1.1e-60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                      COCKFIELD, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13,
                                                                                                                                                                Version +ACM-1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                        ; Sequence 119, Application US/08561469#
; GENERAL INFORMATION:
; APPLICANT: DOUGLAS SMITH
; TITLE OF INVENTION: NUCLEIC ACID #
TITLE OF INVENTION: RELATING TO HE
TITLE OF INVENTION: DIAGNOSTICS AN
NUMBER OF SEQUENCES: 994
; CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-08-561-469A-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-487-032C-119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 271; Conserv
                         ZIP: 02109-1875

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/561,469A
FILING DATE: 17-NOV-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
TELEPAX: (617)227-5941
INFORMATION FOR SEQ ID NO: 119:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                              STREET: 00
STREET: 00
TTTY: Boston
                                                                                                                                                                                                                                               STATE: Massachusetts
COUNTRY: USA
         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc+AF8-feature
LOCATION: 1...285
OTHER INFORMATION: /note+AD0- +
lipooligosaccharide+ACI-
SEQUENCE DESCRIPTION: SEQ ID NO: 119:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 285 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HYPOTHETICAL: NO ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                454 CGCTTGATGCATTTATTGTATGATGCCAGTGTAAAAAAGTGAGCC 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      394 GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 CAAAAATGCATAGAGCTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              334 GAAAAATGCATAGAACTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            274 CATGCGAAGTTTATGAGCTTGGGGGGAGCTTGGGTGCTATGCGAGTCATTATTCCTTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             214 ATGGGGATTACAACCAATCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 CATGCGAAATTTATGAGCTTGGGGGAGCTTGGGTGCTATGCGAGCCATTATTCGTTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTTTGATGCATTTATTGTATGATGCCAGCGTGAAAAGTGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGGGATTGCAACCAGTCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Helicobacter pylor:
                                                                                                                                                                                                                                                                                                                     60 State Street,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08561469A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO HELICOBACTER PYLORI FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32.0%;
         US 08/487,032
                                                                                                                                                                                                                                                                                                                          Suite 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 263.2; DB 8
Pred. No. 1.1e-60;
0; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note+AD0- +ACI-influenzae type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    · 8-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
```

0

Gaps

60

δ 밁 ફ 밁 ફ 밁 5 밁

```
ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
US-08-993-002A-9621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-561-469A-119
                                                                                                                                                                                         Sequence 9621, Application US/08993002A
GENERAL INFORMATION:
APPLICANT: DOUGLAS SMITH et al
TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES
TITLE OF INVENTION: RELATING TO HELICOBACTER PYLORI FOR
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
NUMBER OF SEQUENCES: 10031
CORRESPONDENCE ADDRESS:
ADDRESSE: LAHIVE & COCKFIELD
STREET: 28 STREET: 28 STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (617)227-7400
TELEPAX: (617)227-5941
INPORMATION FOR SEQ ID NO: 119:
SEQUENCE CHARACTERISTICS:
LENGTH: 285 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 271; Conserv
            COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM IS09660
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Windows NT 4.0
SOFTWARE: UNIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 07-JUNE-1995
ATTORNEY/AGENT INFORMATION:
NAME: MANDAY ENAMY E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: GTN-001CP
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGIE TYPE: DN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HYPOTHETICAL: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 1...285
OTHER INFORMATION: /note= "influenzae type
OTHER INFORMATION: lipooligosaccharide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 1...285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Helicobacter pylori
                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           334 GAAAAATGCATAGAACTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               274 CATGCGAAGTTTATGAGCTTGGGGGAGACTTGGGTGCTATGCGAGTCATTATTCCTTGTGG 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          214 ATGGGGATTACAACCAATCTCATCAGTGAGGTTTTCTAAGTTTTATTACGCTTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                   02109-1875
APPLICATION DATA:
                                                                                                                                                                              Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGGGATTGCAACCAGTCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAAACACATCCAAGAGTTAGGCTATATC 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAAAATGCATAGAGCTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCTTGATGCATTTATTGTATGATGCCAGTGTAAAAAAGTGAGCC 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATGCG 240
                                                                                                                                                       Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32.0%; Score 263.2; DB 9 95.4%; Pred. No. 1.1e-60; tive 0; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
```

```
RESULT 14
US-10-335-977-9621
US-10-335-977-9621
; Sequence 9621, Application US/10335---
; GENERAL INFORMATION:
APPLICANT: DOUGLAS SMITH et al
; APPLICANT: DOUGLAS SMITH et al
; TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES
DIAGNOSTICS AND THERAPEUTICS
DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-993-002A-9621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 9621:
SEQUENCE CHARACTERISTICS:
LENGTH: 285 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 271; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: DNJ
HYPOTHETIAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Helico
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: GTI
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 1
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature LOCATION: 1...285
ZIP: 02109-1875
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM IS09660
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: Windows NT
                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            394 GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATATC 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        274 CATGCGAAGTTTATGAGCTTGGGGGAGCTTGGGTGCTATGCGAGTCATTATTCCTTGTGG 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 214 ATGGGGATTACAACCAATCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     454 CGCTTGATGCATTTATTGTATGATGCCAGTGTAAAAAAGTGAGCC 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 CAAAAATGCATAGAGCTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         334 GAAAAATGCATAGAACTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 ATGGGGATTGCAACCAGTCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGCGAAATTTATGAGCTTGGGGGAGCTTGGGTGCTATGCGAGCCATTATTCGTTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATGCG
                                                                                             STREET: 28 State Street
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32.0%;
95.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/993,002A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 263.2; DB 13; Pred. No. 1.1e-60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GIN-018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
```

```
RESULT 15
US-08-993-002A-2792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...285
SEQUENCE DESCRIPTION: SEQ ID NO: 9621:
US-10-335-977-9621
                                                                                                                                                                                Sequence 2792, Application US/08993002A
GENERAL INFORMATION:
APPLICANT: DOUGLAS SMITH et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES
TITLE OF INVENTION: RELATING TO HELICOBACTER PYLORI FOR
TITLE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 32.0%;
Best Local Similarity 95.4%;
Matches 271; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (617)742-4214
INFORMATION FOR SEQ ID NO: 9621:
SEQUENCE CHARACTERISTICS:
LENGTH: 285 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
COMPUTER READABLE FORM:
                                                                                                                       NUMBER OF SEQUENCES: 10031
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
               STREET: 28 State
CITY: Boston
STATE: Massachus
COUNTRY: USA
ZIP: 02109-1875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: UNIX
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/335,977
FILING DATE: 30-Dec-2002
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/993,002
PILING DATE: 17-DEC-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Mandragouras, Amy E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: GTN
TELECOMMUNICATION IMFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANTI-SENSE: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: circular MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                       454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         214 ATGGGGATTACAACCAATCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTTAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAAAATGCATAGAACTCAATGAAGCGATCTGTATTTTAGAAGAGACGATATAACCTTGAAA 393
                                                                                                                                                                                                                                                                                                                                                                                                  CGTTTGATGCATTTATTGTATGATGCCAGCGTGAAAAGTGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                            CGCTTGATGCATTTATTGTATGATGCCAGTGTAAAAAGTGAGCC 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGATTTTAAAGAGGGCTTGGATTTTTTAGAAAAAACACATCCAAGAGTTAGGCTATATC 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAAAATGCATAGAGCTCAATGAAGCGATCTGTATTTTAGAAGACGATATAACCTTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGCGAAATTTATGAGCTTGGGGAGCTTGGGTGCTATGCGAGCCATTATTCGTTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGATTTTAAAAGAGGGCTTGGATTTTTTAGAAAAACACATCCAAGAGTTAGGCTATGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATGCGAAGTTTATGAGCTTGGGGAGGCTTGGGGTGCTATGCGAGTCATTATTCCTTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGGGATTGCAACCAGTCTCATCAGTGAGGTTTCTAAGTTTTATTACGCTTTAAAATAC
                                                             Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Helicobacter pylori
                                                                                                   28 State Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 263.2; DB 4
Pred. No. 1.1e-60;
0; Mismatches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTN-018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 285;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                           밁
                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-993-002A-2792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPAX: (617)742-4114
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 846 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 450; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: MANDIAGOUTAS, AMY E.
REGISTRATION NUMBER: 36,207
REFERENCE/DOCKET NUMBER: GTN
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Helicobacter pylori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: UNIX
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: DY HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: CD/ROM 1505000 COMPUTER: IBM PC Compatible OPERATING SYSTEM: Windows NT SOFTWARE: UNIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature LOCATION: 1...846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: circular
                                                                                                                                                                                                                                                                             302
                                                                                                                                                                                                                                                                                                                299 AGCTTGGGTGCTATGCGAGTCATTATTCCTTGTGGGAAAAATGCATAGAACTCAATGAAG
                                                                                                                                                                                                                                                                                                                                                            242 GCGCGTTAAAAAATTTCTTTTACGCGCTCAAGCATTGCGGGAAGAGGATGGGGTTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                              182 ACCCTTCTTTTATGGTTGAAGATTTATTGGCTTTTTGTAAAAATAAAAAAACACCCCCCTT
                                                                                                                                                                                           362
                                                                                                                                                                                                                              359 CGATCTGTATTTTAGAAGACGATATAACCTTGAAAGAGGATTTTAAAGAGGGCTTGGATT
                                                                                                                                                                                                                                                                                                                                                                                                      239 GIGAGGITTCIAAGITTTAITACGCITTAAAATACCATGCGAAGITTAIGAGCTIGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    122 ATGCGATCTATTCTAAAATCTCTCCCACTCAATTACACCCCTTGATTTTAGAGCATTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 ATGCGATTTATTCTAAAACTTTTGAAGGCGGGTTGCACCCCTTAGTGAAAAAAGCATTTAC
                          482 TGGCTAAACAAAAGACTCCAGTTA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 CTCATATAACCCCCCTTTTAGAGAGCCTTAAACTTCAAGGGATCTCTTATGAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 TGCGTGTTTTGCCATTTCTTTAAATCAAAAGTGTGCGATACATTTGGTTTAGTTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCTTATTTCATCACGCAAAACATCAAAGACATGGG---GATTACAACCAATCTCATCA 238
                                                               CCAGTGTAAAAAGTGAGCCATTGAGCCATAAAAACCACGAGATACAAGAGCGTGTGGGGA 538
                                                                                                                                  TTTTAGAAAAACACATCCAAGAGTTAGGCTATATCCGCTTGATGCATTTATTGTATGATG 478
                                                                                                                                                                                           AGCTTGGGTGCTATGCGAGCCATTATTCGTTGTGGCAAAAAATGCATAGAGCTCAATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCGTGTTTTTATTATTCATTTAAGCCCCCAAAACCTGTAAAAATTTTTTCTTTAAAAAGAAA 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/08/993,002A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 224.4; DB 13;
Pred. No. 6e-50;
0; Mismatches 276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 846;
```

30;

Gaps

61

181

181

121

121

Ś 밁

AAGGGGTTTCTC 517

421

418 361 358 301 298

481

밁

ફ 문 δ 당

ঠ